National Institute of Environmental Health Sciences

Accelerated up-dosing of subcutaneous immunotherapy with a registered allergoid grass pollen preparation

Author(s): Pfaar O, Van Twuijver E, Hecker H, Boot JD, Van Ree R, Klimek L
Year: 2013
Journal: International Archives of Allergy and Immunology. 160 (4): 420-424

Abstract:

Background: Climatic changes causing early pollen flight and new allergens prolonging the pollen season render up-dosing of allergen-specific subcutaneous immunotherapy (SCIT) outside the pollen season considerably more difficult. In addition, for patients with multiple pollen allergies, patients coming near the beginning of pollen season, and patients who wish to up-dose faster, an accelerated induction regimen would be helpful. Methods: In an open, randomized, parallel group, multicenter safety trial, an accelerated up-dosing regimen (0.1-0.3-0.5 ml in weekly intervals) was compared to conventional up-dosing (0.05-0.1-0.2-0.3-0.4-0.5 ml in weekly intervals) with an allergoid grass pollen SCIT preparation. After up-dosing, the maintenance dose was given in monthly intervals. Results: A total of 146 adult patients with rhinitis or rhinoconjunctivitis with or without mild asthma (FEV1 >70%) due to grass pollen were randomized to either the conventional registered up-dosing or an accelerated regimen. In both groups (accelerated regimen, n Euro Surveillance (Bulletin Europeen Sur Les Maladies Transmissibles; European Communicable Disease Bulletin) 69; conventional regimen, n Euro Surveillance (Bulletin Europeen Sur Les Maladies Transmissibles; European Communicable Disease Bulletin) 75), a high proportion of patients (92.75 and 92.0%, respectively) successfully reached the maintenance dose without safety concerns. Furthermore, significant increases in specific IgG and IgG4 after 4 months of treatment were observed in both groups. Conclusion: The accelerated SCIT regimen was found to be as safe as the conventional regimen and might be used to up-dose patients within 2 weeks. Moreover, the immunological effects of both up-dosing regimens were comparable.

Source: http://dx.doi.org/10.1159/000343026

Resource Description

Communication: ☑

resource focus on research or methods on how to communicate or frame issues on climate change; surveys of attitudes, knowledge, beliefs about climate change

A focus of content

Communication Audience: ☑

audience to whom the resource is directed

Health Professional

☑

Exposure : ☑

weather or climate related pathway by which climate change affects health

Air Pollution

Air Pollution: Allergens

Geographic Feature: ☑

resource focuses on specific type of geography

None or Unspecified

Geographic Location: ☑

resource focuses on specific location

Non-United States

Non-United States: Europe

European Region/Country: European Country

Other European Country : Germany

Health Impact: ☑

specification of health effect or disease related to climate change exposure

Respiratory Effect

Respiratory Effect: Asthma, Upper Respiratory Allergy

Intervention: ☑

strategy to prepare for or reduce the impact of climate change on health

A focus of content

Medical Community Engagement: ☑

resource focus on how the medical community discusses or acts to address health impacts of climate change

A focus of content

Mitigation/Adaptation: ☑

mitigation or adaptation strategy is a focus of resource

Adaptation

Population of Concern: A focus of content

Other Vulnerable Population: Patients with pollen allergies

Resource Type: ☑

format or standard characteristic of resource

Research Article

Timescale: ☒

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment: ☒

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content